Algorithm: lengthOfLastWord

Input: A string s representing the input string.

Output: An integer representing the length of the last word in the input string.

- Trim the input string to remove leading and trailing spaces.

trimmedString = s.trim()

- Find the index of the last space in the trimmed string.

lastSpaceIndex = trimmedString.lastIndexOf(' ')

- If there is no space in the trimmed string (i.e., lastSpaceIndex is -1), return the length of the entire trimmed string.

if (lastSpaceIndex == -1) return trimmedString.length()

- Extract the last word from the trimmed string using the substring starting from the index after the last space.

lastWord = trimmedString.substring(lastSpaceIndex + 1)

- Return the length of the last word.

return lastWord.length()

Algorithm: main

Input: None.

Output: Display the length of the last word in the entered string.

- Create a Scanner object to take input from the user.

Scanner scanner = new Scanner(System.in)

- Prompt the user to enter a string.

System.out.print("Enter a string: ")

String userInput = scanner.nextLine()

- Call the lengthOfLastWord function with the user input.

int result = lengthOfLastWord(userInput)

- Display the result.

System.out.println("Length of the last word: " + result)

- Close the Scanner to free up resources.

scanner.close()